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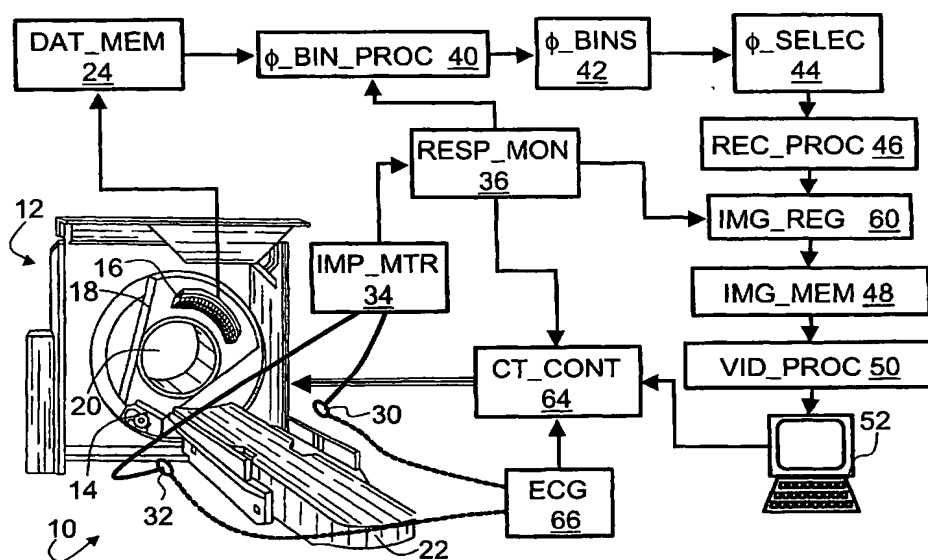
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(54) Title: RESPIRATION MONITOR FOR COMPUTED TOMOGRAPHY



(57) Abstract: A medical diagnostic imaging system (10) includes a diagnostic imaging scanner (12) that acquires imaging data of a medical imaging patient. A reconstruction processor (46) reconstructs at least a portion of the acquired imaging data into an image representation. A pair of electrodes (30, 32) contact a thoracic region of the patient. An electrical meter (34) measures electrical resistance  $R(t)$  or another time-varying electrical parameter (70) across the electrode pair (30, 32) during the acquiring of imaging data. A respiration monitor (36) extracts a time-varying respiration characteristic (90, 98, 110, 120) from the measured time-varying electrical parameter (70) to indicate respiratory cycle phase.

# INTERNATIONAL SEARCH REPORT

In International Application No

PCT/IB 03/06260

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61B6/00 A61B6/03

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MORI M. ET AL: "Accurate contiguous sections without breath-holding on chest CT: value of respiratory gating and ultrafast CT" AMERICAN JOURNAL OF ROENTGENOLOGY, vol. 162, no. 5, 1994, pages 1057-1062, XP009029406 abstract; figure 1	1-3, 12-17,21
Y	pages 1057-58, paragraph SUBJECTS-METHODS	4,18
Y	US R E30 101 E (REGENTS OF THE UNIVERSITY OF MINNESOTA) 25 September 1979 (1979-09-25) abstract; figures 1,3,5 column 1, lines 9-45 column 3, lines 58-68 ----- -/--	4,18

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- \*G\* document member of the same patent family

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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